

thickness of zinc doesn't need to be thick. Then an ~~electricless~~electroless plating step is performed. The chip 210 is dipped into a nickel ions containing solution, then nickel is formed on the medium layer 228 on the chip 210 in an ~~electricless~~electroless plating way. Nickel is deposited on zinc so that a bump body 220 is formed. The size of the bump body 220 can be controlled by the dipping time in nickel ions containing solution. Therefore, the bump body 220 is connected to the bonding pad 216 through the medium layer 228, wherein a material of the bump body 220 includes nickel.

---

[0022] Fig. 8 through Fig. 10 are schematic cross-sectional views showing the progression of steps for producing a bump in accordance with another preferred embodiment of the present invention. In the previous embodiment, the bump body is formed on a chip in an ~~electricless~~electroless plating way. Furthermore, a photolithography process can also be added to control the shape of the bump.

---

[0024] First a photo resist layer 350 is formed on the chip 310. After the photo resist layer 350 has been exposed and developed, a pattern (not shown) is transferred to the photo resist layer 350 so that at least an opening 352 (only one opening is shown), which exposes bonding pad 316, is formed in the photo resist layer 350. An activation step is followed to form a medium layer 328, zinc, on the bonding pad 316 of the chip 310. Then a bump body 320, nickel, is formed on the medium layer 328 inside the opening by ~~electricless~~electroless plating.

---